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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/380,519	09/03/1999	Petri Horppu	1103326-0584	2727

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Patent Department
1155 Avenue of The Americas
New York, NY 10036-2787

EXAMINER	
MCEVOY, THOMAS M	

ART UNIT	PAPER NUMBER
3731	

MAIL DATE	DELIVERY MODE
06/17/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/380,519	HORPPU ET AL.	
	Examiner	Art Unit	
	THOMAS MCEVOY	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-9 and 15-18* is/are pending in the application.

4a) Of the above claim(s) *17 and 18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-9,15 and 16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 2, 5-9, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoon (US 4,548,201) in view of Clark et al. (US 5,643,290).

Regarding claim 1, Yoon discloses a mounting apparatus for mounting an endless cord 10 which is expandable from a contracted condition to an expanded condition onto an end of a structure (cylinder B) having a transverse dimension greater than that of the cord when in the contracted condition, said apparatus comprising a tapered adaptor 100 for the cord to be propelled over onto the end of the structure having a forward smaller end for location in the cord in its contracted condition and a rear larger end for juxtaposing with the end of the structure (Figure 18), said apparatus further comprising an expander device (Figure 21A) movable relative to the adaptor to

propel the cord over the adaptor onto the rear larger end thereof, wherein the adaptor comprises a plurality of circumferentially spaced-apart fingers which extend from the rear larger end towards the forward smaller end and the expander device has a circumference and comprises a plurality of circumferentially spaced-apart arms and wherein the thickness of the arms of the expander device taper in a radial direction towards the center of the circumference (evident from Figure 21A). Yoon discloses providing channels 108 in the adaptor for guiding the cord. Yoon discloses that the expander should provide even pushing force to the cord (col. 3, line 66 to col. 4, line 3). Yoon fails to disclose that the arms are insertable between the fingers &the adaptor. Clark et al. teach that it is advantageous to insert arms of an expander device between fingers of an adaptor to provide better alignment and loading of a cord (Abstract; col. 2, lines 42-44 and elsewhere). It would have been obvious to one of ordinary skill in the art in view of Clark et al. to have made two of the arms of the Yoon expander insertable between fingers of the adaptor in order to better align the adaptor and expander and provide even pushing force to the cord. One of ordinary skill in the art would recognize several ways that this could be done; for example, by adapting the arms to the already formed channels (such as by providing projections similar to those on the cord or narrowing the inner diameter of the arms to match the channels, etc.) which are already intended for a very similar purpose (alignment of the clip with the intermediate cylinder B). Regarding claim 2, the expander device is operable in a first mode thereof to propel the cord over the adaptor on to the rear larger end thereof and in a second mode thereof to propel the cord from the rear larger end onto the end of the structure (col. 3,

line 66 to col. 4, line 3). Regarding claim 5, with the above modification, the adaptor and the expander device would be adapted to mesh with one another to propel the cord over the adaptor to the rear larger end thereof. Regarding claim 6, Yoon discloses that the thickness of the circumferentially spaced-apart fingers of the adaptor taper in a radial direction towards the forward smaller end of the adaptor (col. 11, lines 47-53; this feature would read on the claim if the expander is modified to mate with channels 108). Regarding claim 7, the forward smaller end of the adaptor is presented by a central member 104. Regarding claim 8, the central member and the fingers of the adaptor are connected to one another (Figure 18). Regarding claim 9, the expander device includes a tubular section adapted to slide over the adaptor to propel the cord from the rear larger end thereof onto the end of the structure (for instance, the section directly above the 'Figure 21A' label). Regarding claim 15, Yoon discloses providing the apparatus in a kit (col. 3, lines 28-30). Regarding claim 16, the kit further comprises a surgical instrument 200 for ligating internal body tissue (Figure 23).

Response to Arguments

4. Applicant's arguments filed March 10th 2010 have been fully considered but are not persuasive. Applicant has argued that the channels of Yoon are intended to be free of obstructions which could damage the teeth or needles 18. Examiner respectfully disagrees and believes that one of ordinary skill in the art would easily recognize that any projection extending from the dilator of Yoon should be set back slightly so as not to contact the teeth or needles. Applicant has argued that the channels 108 of Yoon are not intended to guide the ring and are only intended to protect the teeth or needles.

Yoon does disclose that the channels maintain the correct rotational alignment of the ring with the forceps (col. 13, lines 49-59). Regardless, the similarity in structure and function between the devices of Yoon and Clark et al. would lead one of ordinary skill in the art to mutually apply their relevant teachings and combine their compatible features. Clark et al. clearly teach that a keyed alignment between a ring dilator and ring loader is a beneficial feature. Clark et al. make clear that any inter-lockable combination of structures, such as ribs and grooves, are suitable for creating the keyed alignment (col. 4, lines 18-20; col. 12, lines 42-50). Clark et al. also disclose that only two ribs and respective grooves are necessary (col. 13, lines 26-30); further suggesting that the two channels of Yoon would be appropriate for this teaching. Applicant has argued that the system of Yoon ensures alignment of the ring dilator and ring loader and would not benefit from the teachings of Clark et al. The system of Yoon does not ensure that rotation of the dilator is prevented. One of ordinary skill in the art would recognize that the dilator should be prevented from rotating during engagement with the loader so that the ring is not rotated during expansion. One of ordinary skill in the art would recognize that keying the dilator and loader, as taught by Clark et al., would prevent inadvertent rotation of the loader.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas McEvoy whose telephone number is (571)270-5034. The examiner can normally be reached on M-F, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas Mcevoy/
Examiner, Art Unit 3731

/Anhtuan T. Nguyen/
Supervisory Patent Examiner, Art Unit 3731
6/16/10